REMARKS

Claim 12 has been amended. Claims 1-22 are pending, with claims 1, 13, and 20 being independent.

Attached hereto is an Appendix entitled "Version with Markings to Show Changes Made" which is a marked-up version of the portions of the application which have been amended by the present amendment, with brackets indicating deleted matter and underlining indicating added matter.

Submitted herewith are proposed corrections to Figs. 32-39 proposing to label these figures "Prior Art" as required by the Examiner. Upon approval of the proposed corrections and receipt of a Notice of Allowance, the drawings will be corrected in accordance with the procedure established therefor.

A preliminary amendment and a substitute specification were filed on June 22, 1999, but the Office Action of October 25, 2001, does not indicate that the preliminary amendment and the substitute specification of June 22, 1999, have been entered or otherwise acknowledge these papers. Accordingly, it us respectfully requested that the Examiner specifically indicate on the record in the next Office communication that the preliminary amendment and the substitute specification of June 22, 1999, have been entered.

An error appears on the form PTO-892 attached to the Office Action of October 25, 2001, wherein "Yunki et al" should be "Yuuki et al". Accordingly, it is respectfully respected that the Examiner provide with the next Office

communication a corrected form PTO-892 with this error corrected.

The indication that claims 9, 11, 16, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims is acknowledged. However, claims 9, 11, 16, and 19 have not been rewritten in independent form as suggested by the Examiner at this time because, as will be discussed below, independent claims 1 and 13 from which claims 9, 11, 16, and 19 depend are also considered to be allowable over the prior art.

Claims 4 and 12 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicants regard as the invention. This rejection is traversed, both with respect to claim 4 and insofar as the rejection may be deemed to be applicable to claim 12 in its present form.

Dependent claim 4 recites a liquid crystal display device as claimed in claim 3, wherein said reflective polarizer is composed so that said polarized light transmission axis is arranged approximately perpendicularly to a light control axis of said light control element.

Dependent claim 12 now recites a liquid crystal display device as claimed in claim 10, wherein said liquid crystal layer, said reflective polarizing selective layer, said

absorption type polarizing selective layer, and said reflective color selective layer are arranged so that the viewing angle is broadened in a direction perpendicular to the stripe direction of said reflective color selective layer.

In explaining the rejection of claims 4 and 12, the Examiner states as follows:

> Claim 4, it is unclear as recite "the polarized light transmission axis is arranged approximately perpendicularly to a light control axis of the light control element". What is the light control axis of the light control element?
>
> Claim 12, it does not indicate any specific arrangement for the reflective polarizing selective layer, the absorption type polarizing selective layer and the reflective color selective layer, and how to achieve the broaden viewing angle in the stripe direction of the reflective color selective layer.
>
> The claimed language is unclear and indefinite and is not searchable.

With respect to claim 4, it is submitted that a light control axis of said light control element recited in claim 4 which the Examiner considers to be unclear corresponds, for example, to the direction 41 of the stripes of the light control element 40 shown, for example, in Fig. 5.

Thus, referring, for example, to Fig. 5, dependent claim 4 recites a liquid crystal display device as claimed in claim 3, wherein said reflective polarizer 30 is composed so that said polarized light transmission axis 31 is arranged approximately perpendicularly to a light control axis 41 of said light control element 40.

Accordingly, for the reasons discussed above, it is submitted that a light control axis of said light control element recited in claim 4 is not unclear as alleged by the Examiner.

With respect to claim 12, it is submitted that the features now recited in claim 12 are shown, for example, in Figs. 28-29 and described, for example, on page 74, lines 4-22, of the substitute specification submitted with the preliminary amendment of June 22, 1999. It is noted that reflective color selective layer 70 in Fig. 29 has a stripe shape as shown, for example, in Fig. 17 and described, for example, on page 65, lines 22-26, of the substitute specification submitted with the preliminary amendment of June 22, 1999, and that a stripe direction of reflective color selective layer 70 in Fig. 29 is the same as a stripe direction of stripe shaped rod lens array 10D shown in Fig. 29.

Thus, referring, for example, to Figs. 28-29, dependent claim 12 now recites a liquid crystal display device as claimed in claim 10, wherein said liquid crystal layer 13, said reflective polarizing selective layer 73, said absorption type polarizing selective layer 14B, and said reflective color selective layer 70 are arranged so that the viewing angle is broadened in a direction [as indicated by 302A in Fig. 28] perpendicular to the stripe direction of said reflective color selective layer 70.

Accordingly, for the reasons discussed above, it is submitted that the language now recited in claim 12 is not unclear as alleged by the Examiner.

For the reasons discussed above, it is submitted that claims 4 and 12 are in compliance with 35 USC 112, second paragraph, and it is respectfully requested that the rejection of claims 4 and 12 under 35 USC 112, second paragraph, be withdrawn.

Claims 4 and 12 were not rejected over the prior art, but were only rejected under 35 USC 112, second paragraph. Since the rejection of claims 4 and 12 under 35 USC 112, second paragraph, is considered to have been overcome as discussed above, it is submitted that claims 4 and 12 are now in condition for allowance except for their dependency from rejected base claim 1, and an indication that effect is respectfully requested.

Claims 1, 13, and 20 were rejected under 35 USC 102(e) as being anticipated by "the Applicant admitted prior art".

Claims 2-3, 5-7, 10, 14, 17-18, and 22 were rejected under 35 USC 103(a) as being unpatentable over "the Applicant admitted prior art" in view of Gunjima et al. (Gunjima) (U.S. Patent No. 5,587,816).

Claims 8, 15, and 21 were rejected under 35 USC 103(a) as being unpatentable over "the Applicant admitted prior art" in view of Gunjima and Yuuki et al. (Yuuki) (U.S. Patent No. 6,147,725).

These rejections are respectfully traversed.

At the outset, it is submitted that the rejection of claim 5 under 35 USC 103(a) as being unpatentable over "the Applicant admitted prior art" in view of Gunjima is improper because claim 5 depends from claim 4 which was not rejected over the prior art. Absent such a rejection of claim 4 over the prior art, it is submitted that claim 4 and claim 5 depending therefrom are allowable over the prior art except for their dependency from rejected base claim 1, and it is respectfully requested that the rejection of claim 5 under 35 USC 103(a) as being unpatentable over "the Applicant admitted prior art" in view of Gunjima be withdrawn.

Independent claim 1 recites a liquid crystal display device comprising an illumination device, a light control element arranged at a projected light side of said illumination device, a reflective polarizer arranged at an upper portion of said light control element so that the transmission axis of polarized light is adjusted so as to increase the transmission rate of the projected light from said illumination device, a liquid crystal display element for controlling polarization of projected light projected from said reflective polarizer, and a screen arranged at an upper portion of said liquid crystal display element.

Independent claim 13 recites a liquid crystal display device comprising an illumination device, a light control element arranged at a projected light side of said illumination device, a reflective polarizer arranged at an upper portion of said light control element, a liquid crystal

display element for controlling polarization of projected light projected from said reflective polarizer so that the major axis direction of a pixel is arranged approximately in parallel with a direction wherein the linearly polarized light component of the projected light projected from said illumination device is high, and a screen arranged at an upper portion of said liquid crystal display element.

Independent claim 20 recites a liquid crystal display device comprising an illumination device, a light control element arranged at a projected light side of said illumination device, a reflective polarizer arranged at an upper portion of said light control element, wherein the transmission axis of polarized light is arranged so that a rate of transmission of the polarized light projected from said illumination device is increased, a liquid crystal display element for controlling polarization of projected light projected from said reflective polarizer so that the major axis direction of a pixel is arranged approximately in parallel with a direction wherein the linearly polarized light component of the projected light projected from said illumination device is high, and a screen arranged at an upper portion of said liquid crystal display element.

In explaining the rejection of claims 1, 13, and 20, the Examiner states as follows:

> Claims 1, 13 and 20, the Applicant admitted prior art (the "background of the invention" paragraph in the specification, especially in Figs. 32 and 35) discloses the structure of a liquid crystal display device comprising:

(concerning claim 1)

- an illumination device (51,53,54);

- a light control element (40) arranged at a projected light side of the illumination device;

- a reflective polarizer (30) arranged at an upper portion of the light control element (40), so that the transmission axis of polarized light is adjusted so as to increase the transmission rate of the projected light from the illumination device (51,53,54);

(concerning claims 13 and 20)

- a liquid crystal display element (20) for controlling polarization of projected light projected from the reflective polarizer (30), so that the major axis direction of a pixel is arranged approximately in parallel with a direction wherein the linearly polarized light component of the projected light projected from the illumination device (51,53,54) is high;

- a screen (10AA) arranged at an upper portion of the liquid crystal display element.

However, it is submitted that prior-art Figs. 32 and 35 of the present application relied on by the Examiner do not disclose a reflective polarizer arranged at an upper portion of said light control element so that the transmission axis of polarized light is adjusted so as to increase the transmission rate of the projected light from said illumination device as recited in claim 1; or a liquid crystal display element for controlling polarization of projected light projected from said reflective polarizer so that the major axis direction of a pixel is arranged approximately in parallel with a direction wherein the linearly polarized light component of the

projected light projected from said illumination device is high as recited in claim 13; or a reflective polarizer arranged at an upper portion of said light control element, wherein the transmission axis of polarized light is arranged so that a rate of transmission of the polarized light projected from said illumination device is increased and a liquid crystal display element for controlling polarization of projected light projected from said reflective polarizer so that the major axis direction of a pixel is arranged approximately in parallel with a direction wherein the linearly polarized light component of the projected light projected from said illumination device is high as recited in claim 20. Nor did the Examiner point out where prior-art Figs. 32 and 35 disclose these features of claims 1, 13, and 20. Nor did the Examiner explain how any other portion of "the Applicant admitted prior art" may be considered to disclose these features of claims 1, 13, and 20.

Furthermore, it is submitted that prior-art Fig. 35 of the present application relied on by the Examiner does not disclose a screen arranged at an upper portion of said liquid crystal display element as recited in claims 1, 13, and 20. Nor did the Examiner point out where prior-art Fig. 35 discloses these features of claims 1, 13, and 20.

Nor is it seen where any one of prior-art Figs. 33-34, and 36-39 of the present application discloses all of the features recited in claims 1, 13, and 20.

Since the Examiner has rejected claims 1, 13, and 20 under 35 USC 102(e) as being anticipated by "the Applicant admitted prior art", it is submitted that for each of claims 1, 13, and 20, the Examiner is required to identify a single embodiment disclosed in "the Applicant admitted prior art" which discloses all of the features recited in that claim 1, 13, or 20. It is submitted that the Examiner cannot rely on a combination of two different portions of "the Applicant admitted prior art" to show all of the features recited in that claim 1, 13, or 20 because this would require a rejection for obviousness under 35 USC 103(a), rather than a rejection for anticipation under 35 USC 102(e) as has been set forth by the Examiner.

Accordingly, for the reasons discussed above, it is submitted that "the Applicant admitted prior art" does not disclose a reflective polarizer arranged at an upper portion of said light control element so that the transmission axis of polarized light is adjusted so as to increase the transmission rate of the projected light from said illumination device and a screen arranged at an upper portion of said liquid crystal display element as recited in claim 1; or a liquid crystal display element for controlling polarization of projected light projected from said reflective polarizer so that the major axis direction of a pixel is arranged approximately in parallel with a direction wherein the linearly polarized light component of the projected light projected from said illumination device is high and a screen arranged at an upper

portion of said liquid crystal display element as recited in claim 13; or a reflective polarizer arranged at an upper portion of said light control element, wherein the transmission axis of polarized light is arranged so that a rate of transmission of the polarized light projected from said illumination device is increased, a liquid crystal display element for controlling polarization of projected light projected from said reflective polarizer so that the major axis direction of a pixel is arranged approximately in parallel with a direction wherein the linearly polarized light component of the projected light projected from said illumination device is high, and a screen arranged at an upper portion of said liquid crystal display element as recited in claim 20 in the sense of 35 USC 102(e).

Nor is it seen where the features of claims 1, 13, and 20 discussed above are suggested by "the Applicant admitted prior art", or are disclosed or suggested by Gunjima and Yuuki.

Since "the Applicant admitted prior art", Gunjima, and Yuuki do not disclose or suggest the features of independent claims 1, 13, and 20 discussed above, it is submitted that independent claims 1, 13, and 20 and claims 2-12, 14-19, and 21-22 depending therefrom patentably distinguish over "the Applicant admitted prior art", Gunjima, and Yuuki in the sense of 35 USC 102(e) and 103(a), and it is respectfully requested that the rejections of claims 1-3, 5-8, 10, 13-15, 17-18, and 20-22 under 35 USC 102(e) and 103(a) over "the Applicant admitted prior art", Gunjima, and Yuuki be withdrawn.

Although dependent claims 2-3, 5-8, 10, 14-15, 17-18, and 21-22 are considered to be allowable by virtue of their dependency from allowable independent claims 1, 13, and 20, it is noted that these dependent claims also recite further features of the present invention which are not seen to be disclosed or suggested by the prior art.

As recognized by the Examiner, the other references cited but not relied upon neither disclose nor suggest the present invention, and thus no further discussion of these other references is deemed necessary at this time.

It is submitted that all of the Examiner's objections and rejections have been overcome, and that the application is now in condition for allowance. Reconsideration of the application and an action of a favorable nature are respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any

overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (503.36984X00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

Paul J. Skwierawski Reg No 32,173 for
Melvin Kraus
Registration No. 22,466

MK/RSS
(703) 312-6600

Attachment

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Changes made to the application by the present amendment are indicated below, with brackets indicating deleted matter and underlining indicating added matter.

IN THE CLAIMS

Claim 12 has been amended as follows:

--12. (Amended) A liquid crystal display device as claimed in claim 10, wherein said liquid crystal layer, said reflective polarizing selective layer, said absorption type polarizing selective layer, and said reflective color selective layer are arranged so that the viewing angle is broadened in a direction [of] perpendicular to the stripe direction of said reflective color selective layer.--